R E M A R K S

Careful review and examination of the subject application are noted and appreciated.

SUPPORT FOR THE CLAIM AMENDMENTS

Support for the claim amendments may be found in the specification, for example, on page 20 line 9-page 22 line 3 and FIG. 5, as originally filed. Thus, no new matter has been added.

OBJECTION TO THE DRAWINGS

The objections the drawings have been obviated in part by amendment, is respectfully traversed in part, and should be withdrawn.

FIG. 4 of the application shows four circuits 182a-182d, each configured to perform a motion vector search for a current block. See the specification, page 20, line 9 thru page 21, line 21 for details. As such, the claim elements are shown in the figures and the objection should be withdrawn.

Regarding FIG. 3, the word "GOLBAL" has been changed to "GLOBAL" in boxes 142 and 146. As such, the objection to the drawings should be withdrawn.

OBJECTION TO THE SPECIFICATION

The objection the specification has been obviated by amendment and should be withdrawn.

CLAIM REJECTIONS UNDER 35 U.S.C. §101

The rejection of claims 1-19 under 35 U.S.C. §101 for utility has been obviated by amendment and should be withdrawn.

CLAIM REJECTIONS UNDER 35 U.S.C. §102

The rejection of claims 1 and 11-18 under 35 U.S.C. §102(e) as being anticipated by Topper '460 has been obviated by amendment and should be withdrawn.

Topper concerns a method and apparatus for calculating motion vectors (Title).

Claim 1 provides both (i) a first circuit configured to copy a plurality of first reference samples of a first reference image from the memory and (ii) a second circuit configured to (i) copy a plurality of second reference samples of the first reference image from the memory. In contrast, Topper appears to be silent regarding two motion estimation circuits copying reference samples from a prior field memory 112. Therefore, Topper does not appear to disclose or suggest both (i) a first circuit configured to copy a plurality of first reference samples of a first reference image from the memory and (ii) a second circuit configured to (i) copy a

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plurality of second reference samples of the first reference image from the memory, as presently claimed. Claims 11 and 20 provide language similar to claim 1.

Claim 1 further provides that both (i) the first circuit is configured to generate a first motion vector corresponding to a first current block of a current image by searching among the first reference samples and (ii) the second circuit is configured to generate a second motion vector corresponding to the first current block by searching among the second reference samples. In contrast, Topper appears to be silent regarding two searches for two motion vectors of one current field block by searching two different areas of a prior field. Therefore, Topper does not appear to disclose or suggest both (i) the first circuit is configured to generate a first motion vector corresponding to a first current block of a current image by searching among the first reference samples and (ii) the second circuit is configured to generate a second motion vector corresponding to the first current block by searching among the second reference samples, as presently claimed. Claims 11 and 20 provide language similar to claim 1. As such, the claimed invention is fully patentable over the cited reference and the rejection should be withdrawn.

Claims 13-16 depend from claim 11, which is now believed to be allowable. As such, the dependent claims are fully

patentable over the cited reference and the rejections should be withdrawn.

New claims 21-25 depend from claims 1 and 11, which are now believed to be allowable. As such, the new claims are fully patentable over the cited reference and should be allowed.

CLAIM REJECTIONS UNDER 35 U.S.C. §103

The rejection of claims 2-9 and 20 under 35 U.S.C. §103(a) as being unpatentable over Topper in view of Minami et al. '986 (hereafter Minami) has been obviated by amendment and should be withdrawn.

The rejection of claims 10 and 19 under 35 U.S.C. §103(a) as being unpatentable over Topper in view of Bakhmutsky et al. US Pub. No. 2002/0176500 (hereafter Bakhmutsky) has been obviated by amendment and should be withdrawn.

Claim 2 provides that the first circuit comprises a search memory having a read port and a write port, the write port being separate from the read port. In contrast, Minami appears to be silent regarding a search area memory 23 having a read port separate from a write port. Therefore, Topper and Minami, alone or in combination, do not appear to teach or suggest a search memory having a read port and a write port, the write port being different than the read port, as presently claimed. As such, claim 2 is

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fully patentable over the cited references and the rejection should be withdrawn.

Claims 2, 4-7, 9, 10 and 19 depend from claims 1 and 11, which are now believed to be allowable. As such, the dependent claims are fully patentable over the cited references and the rejections should be withdrawn.
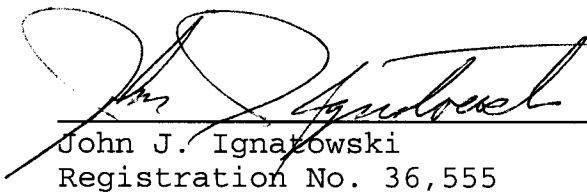
Accordingly, the present application is in condition for allowance. Early and favorable action by the Examiner is respectfully solicited.

The Examiner is respectfully invited to call the Applicants' representative between the hours of 9 a.m. and 5 p.m. ET at 586-498-0670 should it be deemed beneficial to further advance prosecution of the application.

If any additional fees are due, please charge Deposit Account No. 12-2252.

Respectfully submitted,

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Dated: May 31, 2007

c/o Henry Groth
LSI Corporation

Docket No.: 1496.00344 / 03-1040

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